

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 58 (Previously presented): A water-dispersible liquid vitamin animal food additive comprising:

- a) from 10% to 60% by weight of a vitamin component selected from the group consisting of:
 - (i) precursors of Vitamin A;
 - (ii) precursors of Vitamin E;
 - (iii) a mixture of precursors of Vitamin A and precursors of Vitamin E;
 - (iv) a mixture of precursors of Vitamin A and Vitamin D3;
 - (v) a mixture of precursors of Vitamin E and Vitamin D3; and
 - (vi) a mixture of precursors of Vitamin A, precursors of Vitamin E, and Vitamin D3;
 - b) from 2% to 15% by weight of a C4 to C6 alkyl lactate;
 - c) from 20% to 50% by weight of one or more veterinarily acceptable emulsifiers;
 - d) from 1% to 15% by weight of water; and
 - e) from 2% to 10% of an oil;
- wherein the flashpoint of the additive is about 200°F or greater.

Claim 59 (Previously presented): The additive of claim 58, wherein said additive further comprises from 1% to 15% by weight of a veterinarily acceptable stabilizer.

Claim 60 (Previously presented): The additive of claim 59, wherein the stabilizer is propylene glycol.

Claim 61 (Previously presented): The additive of claim 58, wherein the amount of the alkyl lactate is from 4% to 7%.

Claim 62 (Previously presented): The additive of claim 58, wherein the additive is free of a flammable alcohol.

Claim 63 (Previously presented): The additive of claim 58, wherein the ratio of b) to d) is from 1:5 to 10:1.

Claim 64 (Previously presented): The additive of claim 58, wherein the emulsifier is a non-ionic surfactant.

Claim 65 (Previously presented): The additive of claim 58, further comprising from 0.5% to 6% by weight of an antioxidant.

Claim 66 (Previously presented): The additive of claim 65, wherein the antioxidant is ethoxyquin, BHT or BHA.

Claim 67 (Previously presented): The additive of claim 66, wherein the antioxidant is ethoxyquin.

Claim 68 (Previously presented): The additive of claim 58, wherein the viscosity of the additive is from 1000 cP to 10000 cP at 0°C.

Claim 69 (Previously presented): The additive of claim 58, wherein the viscosity of the additive is from 100 cP to 2000 cP at 15°C.

Claim 70 (Previously presented): The additive of claim 58, wherein said additive disperses into water and forms a finely divided emulsion within 2 minutes when added at a ratio of additive to water of from 1 g/kg to 50 g/kg and stirred manually at a temperature of from 15°C to 25°C.

Claim 71 (Previously presented): The additive of claim 58, wherein the amount of water is from 1% to 5% by weight.

Claim 72 (Previously presented): The additive of claim 58, wherein component a) is precursors of Vitamin A.

Claim 73 (Previously presented): The additive of claim 58, wherein component a) is precursors of Vitamin E.

Claim 74 (Previously presented): The additive of claim 58, wherein component a) comprises a precursor of Vitamin A and Vitamin D3 and the weight/weight ratio of the precursor of Vitamin A to Vitamin D3 is from 100:1 to 40:1.

Claim 75 (Previously presented): The additive of claim 72, wherein the total amount of the precursors of Vitamin A in the additive is from 15 to 50% by weight.

Claim 76 (Previously presented): The additive of claim 73, wherein the total amount of the precursors of Vitamin E in the additive is from 10 to 60% by weight.

Claims 77 to 95 (canceled).

Claim 96 (Previously presented): The additive of claim 58, further comprising a fungicide.

Claim 97 (Canceled).

Claim 98 (Previously presented): A water-dispersible liquid vitamin animal food additive comprising:

- a) from 1% to 6% by weight of Vitamin D3;
 - b) from 2% to 15% by weight of a C4 to C6 alkyl lactate;
 - c) from 20% to 50% by weight of one or more veterinarily acceptable emulsifiers;
 - d) from 1% to 15% by weight of water; and
 - e) from 5% to 30% by weight of an oil;
- wherein the flashpoint of the additive is about 200°F or greater.

Claim 99 (canceled).

Claim 100 (Previously presented): A water-dispersible liquid vitamin animal food additive comprising:

a) from 10% to 60% by weight of a vitamin component selected from the group consisting of:

- (i) a precursor of Vitamin A;
 - (ii) a precursor of Vitamin E;
 - (iii) a mixture of a precursor of Vitamin A and a precursor of Vitamin E;
 - (iv) a mixture of a precursor of Vitamin A and Vitamin D3;
 - (v) a mixture of a precursor of Vitamin E and Vitamin D3; and
 - (vi) a mixture of a precursor of Vitamin A, a precursor of Vitamin E, and Vitamin D3;
- b) from 2% to 15% by weight of a C4 to C6 alkyl lactate;
- c) from 20% to 50% by weight of one or more veterinarily acceptable emulsifiers;
- d) from 1% to 15% by weight of water; and
- e) from 2% to 10% of an oil;
- wherein the flashpoint of the additive is about 200°F or greater.

Claim 101 (Canceled).

Claim 102 (Previously presented): The additive of claim 58, wherein the precursors of Vitamin A is retinyl propionate.

Claim 103 (Previously presented): The additive of claim 100, wherein the precursor of Vitamin A is retinyl propionate.

Claim 104 (Canceled).

Claim 105 (Previously presented): The additive of claim 58, wherein the precursors of Vitamin E is (dl) alpha tocopheryl acetate.

Claim 106 (Previously presented): The additive of claim 100, wherein the precursor of Vitamin E is (dl) alpha tocopheryl acetate.

Claim 107 (Canceled).

Claim 108 (Previously presented): The additive of claim 58, wherein the vitamin component is a mixture of retinyl propionate and Vitamin D3.

Claim 109 (Previously presented): The additive of claim 100, wherein the vitamin component is a mixture of retinyl propionate and Vitamin D3.

Claim 110 (Canceled).

Claim 111 (Previously presented): The additive of claim 58, wherein the vitamin component is a mixture of retinyl propionate, Vitamin D3 and (dl) alpha tocopheryl acetate.

Claim 112 (Previously presented): The additive of claim 100, wherein the vitamin component is a mixture of retinyl propionate, Vitamin D3 and (dl) alpha tocopheryl acetate.

Claim 113 (Canceled).

Claim 114 (New): A water-dispersible liquid vitamin animal food additive comprising:

- a) from 10% to 60% by weight of a vitamin component selected from the group consisting of:
 - (i) precursors of Vitamin A;
 - (ii) precursors of Vitamin E;
 - (iii) a mixture of precursors of Vitamin A and precursors of Vitamin E;
 - (iv) a mixture of precursors of Vitamin A and Vitamin D3;
 - (v) a mixture of precursors of Vitamin E and Vitamin D3; and
 - (vi) a mixture of precursors of Vitamin A, precursors of Vitamin E, and Vitamin D3;
- b) from 3% to 15% by weight of a C1 to C3 alkyl lactate;
- c) from 20% to 50% by weight of one or more veterinarily acceptable emulsifiers;
- d) from 3% to 15% by weight of water; and
- e) from 2% to 10% of an oil;

wherein the flashpoint of the additive is about 200°F or greater.

Claim 115 (New): The additive of claim 114, wherein said additive further comprises from 1% to 15% by weight of a veterinarily acceptable stabilizer.

Claim 116 (New): The additive of claim 115, wherein the stabilizer is propylene glycol.

Claim 117 (New): The additive of claim 114, wherein the amount of the C1-C3 alkyl lactate is from 3% to 12%.

Claim 118 (New): The additive of claim 114, wherein the additive is free of a mono-hydroxy alcohol.

Claim 119 (New): The additive of claim 114, wherein the ratio of b) to d) is from 1:5 to 4:1.

Claim 120 (New): The additive of claim 114, wherein the emulsifier is a non-ionic surfactant.

Claim 121 (New): The additive of claim 114, further comprising from 0.5% to 6% by weight of an antioxidant.

Claim 122 (New): The additive of claim 121, wherein the antioxidant is ethoxyquin, BHT or BHA.

Claim 123 (New): The additive of claim 123, wherein the antioxidant is ethoxyquin.

Claim 124 (New): The additive of claim 114, wherein the viscosity of the additive is from 1000 cP to 10000 cP at 0°C.

Claim 125 (New): The additive of claim 114, wherein the viscosity of the additive is from 100 cP to 2000 cP at 15°C.

Claim 126 (New): The additive of claim 114, wherein said additive disperses into water and forms a finely dispersed emulsion within 2 minutes when added at a ratio of additive to water of from 1 g/kg to 50 g/kg and stirred manually at a temperature of from 15°C to 25°C.

Claim 127 (New): The additive of claim 114, wherein the amount of water is from 3% to 6% by weight.

Claim 128 (New): The additive of claim 114, wherein component a) is precursors of Vitamin A.

Claim 129 (New): The additive of claim 114, wherein component a) is precursors of Vitamin E.

Claim 130 (New): The additive of claim 114, wherein component a) comprises a precursor of Vitamin A and Vitamin D3 and the weight/weight ratio of the precursor of Vitamin A to Vitamin D3 is from 100:1 to 40:1.

Claim 131 (New): The additive of claim 128, wherein the total amount of the precursors of Vitamin A in the additive is from 15 to 50% by weight.

Claim 132 (New): The additive of claim 129, wherein the total amount of the precursors of Vitamin E in the additive is from 10% to 30% by weight.

Claim 133 (New): The additive of claim 114, further comprising a fungicide.

Claim 134 (New): A water-dispersible liquid vitamin animal food additive comprising:

- a) from 1% to 6% by weight of Vitamin D3;
 - b) from 3% to 15% by weight of a C1 to C3 alkyl lactate;
 - c) from 20% to 50% by weight of one or more veterinarily acceptable emulsifiers;
 - d) from 1% to 15% by weight of water; and
 - e) from 5% to 30% by weight of an oil;
- wherein the flashpoint of the additive is about 200°F or greater.

Claim 135 (New): A water-dispersible liquid vitamin animal food additive comprising:

a) from 10% to 60% by weight of a vitamin component selected from the group consisting of:

- (i) a precursor of Vitamin A;

- (ii) a precursor of Vitamin E;
 - (iii) a mixture of a precursor of Vitamin A and a precursor of Vitamin E;
 - (iv) a mixture of a precursor of Vitamin A and Vitamin D3;
 - (v) a mixture of a precursor of Vitamin E and Vitamin D3; and
 - (vi) a mixture of a precursor of Vitamin A, a precursor of Vitamin E, and Vitamin D3;
- b) from 3% to 15% by weight of a C1 to C3 alkyl lactate;
 - c) from 20% to 50% by weight of one or more veterinarily acceptable emulsifiers;
 - d) from 3% to 15% by weight of water; and
 - e) from 2% to 10% of an oil;
- wherein the flashpoint of the additive is about 200°F or greater.

Claim 136 (New): The additive of claim 135, wherein the precursor of Vitamin A is retinyl propionate.

Claim 137 (New): The additive of claim 135, wherein the precursor of Vitamin E is (dl) alpha tocopheryl acetate.

Claim 138 (New): The additive of claim 135, wherein the vitamin component is a mixture of retinyl propionate and Vitamin D3.

Claim 139 (New): The additive of claim 135, wherein the vitamin component is a mixture of retinyl propionate, Vitamin D3 and (dl) alpha tocopheryl acetate.